

## **APPENDIX B**

### **Economic Assessment of True North Haul Road on Winter Tourism in Alaska**

# **ECONOMIC ASSESSMENT OF TRUE NORTH HAUL ROAD ON WINTER TOURISM IN ALASKA**

*Submitted to*

**Alaska Department of Natural Resources**  
*Division of Mining, Land and Water*

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*Prepared by*

*In association with*

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# 1 Introduction

This document updates the tourism portion of *Socioeconomic Baseline Analysis of the Proposed True North Mine*, published in September 2000. Kelley Hegarty & Associates, LLC, retained the services of the largest economic consulting firm in Alaska, Northern Economics, Inc. to assess economic impacts of the current operating procedures of the True North haul road on winter tourism revenues in Alaska, in accordance with the Department of Natural Resources' (DNR's) responsibility to evaluate the statewide impacts of proposed resource development on state lands. Northern Economics was selected by the Alaska Department of Community and Economic Development to conduct the 2000-2001 Alaska Visitor Statistics Program (AVSP) which includes interviews and analysis of the travel patterns of 5,000 visitors to Alaska.

Tourism operators report that Cleary Summit is a tourism destination primarily for aurora viewing and downhill skiing. The primary revenues generated are reported to be either a direct or indirect result of the aurora viewing opportunities. Thus, the specific focus of this analysis is on visitors who come to view the Northern Lights (aurora borealis). According to the National Oceanic and Atmospheric Administration being able to view the aurora depends mainly on two factors:

1. Geomagnetic activity—the degree of disturbance of the earth's magnetic field
2. Geographic location—how close you are to the earth's magnetic poles

Interior Alaska enjoys a unique location for aurora viewers in terms of its relationship to the northern magnetic pole. Visitors can view the aurora from many places in the world, when geomagnetic activity is high, but when geomagnetic activity is low, the aurora is typically located about 67° magnetic north latitude. Since Fairbanks' adjusted magnetic latitude is 64° N, the aurora can be seen even when geomagnetic activity is low. In comparison, Stockholm, Sweden has an adjusted magnetic latitude of 55°, Oslo, Norway 56°, and Reykjavik, Iceland 64°.

Other factors that affect the ability to view the aurora are weather and light pollution from city lights, a full moon, etc. While the aurora can be seen from all over Fairbanks, the most spectacular views are away from the city lights. Popular tourist aurora viewing destinations in and around Fairbanks include Cleary Summit, Chena Hot Springs, Chatanika Gold Camp, Chatanika Lodge, and Chena Lakes Recreation Area.

Fairbanks' magnetic latitude, proximity to Japan, the amenities available, and the wilderness appeal of Alaska contribute to its popularity with Japanese tourists. Estimates of the number of Japanese tourists who visit Fairbanks in the winter range from 6,000 to 8,000, but the exact number in any one year is not available from any source. The Fairbanks Convention and Visitors Bureau has made estimates in the past by interviewing Japanese tour operators; however, there is no central data source. According to the tour brokers interviewed, the vast majority of Japanese visitors who come to view the aurora stay in Fairbanks and are bussed nightly to Mt. Aurora Skiland at Cleary Summit to view the aurora.

Operators of businesses at Cleary Summit have expressed concerns that the engine and brake noise and visual impacts (lights and dust) from trucks hauling ore on the True North haul road will negatively affect the number of tourists visiting their businesses and, in turn, reduce overall Japanese tourism in the Interior. Residents of the area personally report experiencing many of these negative effects, but the analysis of residential impacts is not within the scope of this study. This study has been conducted to determine the degrees to which the current operating procedures of the True North haul road have reduced the number of tourists visiting Cleary Summit, the Interior, and/or Alaska.

A reconnaissance of the primary aurora viewing sites in and around Fairbanks by a public policy analyst and tourism specialist from Northern Economics, Inc. included interviews with the potentially

affected tourism business operators. Telephone interviews were conducted with three Japanese tour operators in Anchorage that broker trips to Fairbanks for aurora viewing. A telephone interview was also conducted with Kojiro Abe, the Alaska State Representative in Japan. Previous studies on Japanese tourism were reviewed along with numerous other public documents related to 1) the True North haul road, and 2) Alaska tourism.

This report includes a review of statewide Alaska tourism numbers and expenditures, external factors affecting 2000-2002 aurora viewing visitor arrivals, descriptions of the existing and potential aurora viewing locations, and an brief analysis of the impacts to date of the True North haul road on tourism related to aurora viewing visitors.

Detail on the following summary of conclusions is presented in the body of this report. In the course of their research, Northern Economics found quantitative information supporting negative tourism impacts from the terrorist events of September 11, 2001. For example, tour companies that serve Japanese tourists all noted significant declines in the number of visitors from Japan in winter, 2001-02. The continued stagnation of the Japanese economy also appears to have had negative impacts on the number of Japanese tourists visiting Fairbanks.

However, Northern Economics was unable to identify any quantifiable evidence of negative effects on tourism from operation of the True North haul road. Qualitative information from the Japanese tour brokers interviewed stated that, to date, there have been no negative effects on the number of visitors at Cleary Summit from the operation of the True North haul road. However, since the haul road has only been in operation for one year, it is possible that there are negative effects from operation of the haul road but they are very small when compared to other economic factors.

March has typically been one of the best months of the year for aurora viewing. There is some quantifiable evidence to suggest that the market for aurora viewing began to rebound in March 2002.

## 2 Statewide Alaska Tourism

### 2.1 Number of Visitors

According to the Alaska Travel Industry Association, tourism is Alaska's fastest growing industry and Alaska's second largest private-sector employer, accounting for one in eight private-sector jobs. Neal Fried, State of Alaska Labor Economist, said in October 2001 "The tourism industry during the past decade was growing much faster overall than the rest of the Alaska economy." He said that tourism is a bright spot for the state because unlike traditional industries in Alaska, including oil, fishing, timber, and mining, tourism has experienced long-term, sustained growth and has steered clear of boom-and-bust cycles.<sup>1</sup>

The Alaska Visitors Statistics Program (AVSP) conducted on a periodic basis by the State of Alaska Department of Community and Economic Development, estimates that Alaska received 254,400 visitors during Fall/Winter 2000-01 (October through April) and 1,202,800 visitors in Summer 2001 (May through September). Visitors can be characterized according to trip purpose including Business Only, Business and Pleasure, Vacation and Pleasure, and Visiting Friends and Relatives. In Fall/Winter 2000-2001 the most common trip purpose was Business Only (Table 1) while in Summer 2001 the most common trip purpose was Vacation and Pleasure (Table 2).

**Table 1. Number of Visitor Arrivals by Purpose of Trip in Fall/Winter 2000-2001**

Trip Purpose	Number of Visitors
Vacation and Pleasure	45,000
Visiting Friends & Relatives	64,000
Business and Pleasure	30,000
Business Only	111,000
Other	4,500
<b>Total Arrivals</b>	<b>254,500</b>

Source: *Alaska Visitor Statistics Program Alaska Visitor Arrivals Fall/Winter 2000-2001* prepared for the State of Alaska, Department of Community and Economic Development by Northern Economics, Inc.

**Table 2. Number of Visitor Arrivals by Purpose of Trip, Summer 2001**

Purpose of Trip	Number of Visitors
Vacation and Pleasure	896,100
Visiting Friends and Relatives	71,000
Business and Pleasure	57,700
Business Only	178,000
Seasonal Workers	n/a
<b>Total Visitor Arrivals</b>	<b>1,202,800</b>

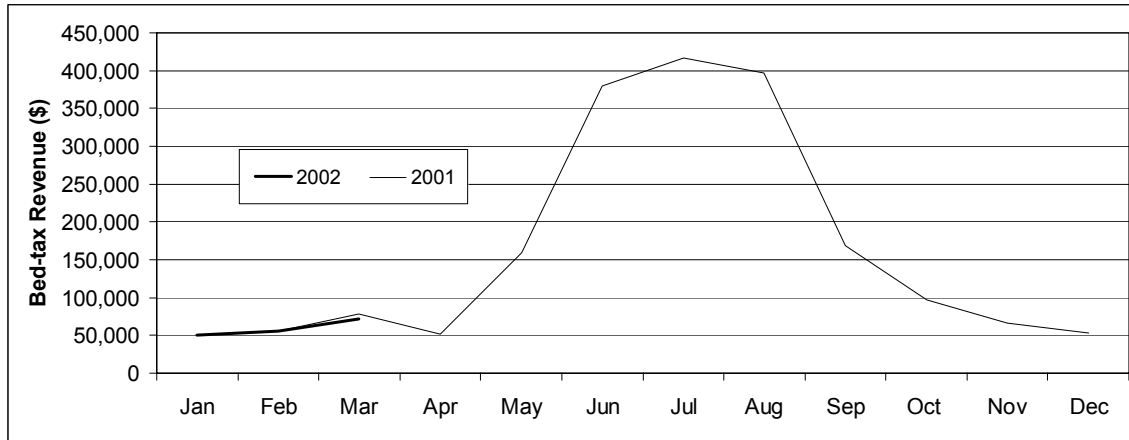
Source: *Alaska Visitor Statistics Program Alaska Visitor Arrivals Summer 2001* prepared for the State of Alaska, Department of Community and Economic Development by Northern Economics, Inc.

<sup>1</sup> Dobbyn, Paula "Alaskans Are Upbeat about Fiscal Outlook, Economist Says." *Anchorage Daily News*, 10/12/2001.



Alaska has been branded as primarily a summer destination and promotional efforts are underway to overcome this reputation. However, as the bed tax revenues presented in Figure 1 demonstrate even Fairbanks with its growing reputation as a winter destination for Japanese tourists is still mainly a summer destination.

**Figure 1. Hotel/Motel Tax for City of Fairbanks**



Source: <http://www.ci.fairbanks.ak.us/>.

## 2.2 Visitor Expenditures

According to the most recent AVSP, the average expenditure by visitor per trip in Fall/Winter 2000-01 was \$634. These expenditures do not include the costs of travel to and from the State except for visitors who arrive by ferry. Visitors to Alaska during Fall/Winter 2000-01 are estimated to have spent almost \$300 million in the State.

### 3 Fairbanks Winter Tourism

The primary motivations for Japanese tourists to visit Interior Alaska in the winter have been identified as the desire to view the aurora, to experience cold temperatures, to participate in outdoor activities such as dog sledding, and to view wildlife.<sup>2</sup> Estimates of the number of Japanese tourists who visit Fairbanks in the winter range from 6,000 to 8,000, but the exact number in any one year is not available. The Fairbanks Convention and Visitors Bureau has made estimates in the past by interviewing Japanese tour operators. However, there is no reliable central data source.

The majority of Japanese tourists to Fairbanks purchase package trips before they leave Japan for their airfare to, from, and within Alaska, for their accommodations, and for most sightseeing excursions. Survey research estimates that they spend approximately \$523 in out-of-pocket expenses during their visit.<sup>3</sup>

According to telephone interviews with three tour operators, most Japanese visitors spend three or four nights in Fairbanks and a night in Anchorage on either their arrival or departure. Other groups will spend three or four nights at a location outside of Fairbanks, for example at Mount Aurora Fairbanks Creek Lodge, Cleary Summit Bed & Breakfast, Chatanika Lodge, Chatanika Gold Camp, Chena Hot Springs Resort, Arctic Circle Hot Springs Resort, or Bettles Lodge. All three Japanese tour operators explained that visitors staying in Fairbanks travel to an aurora viewing location almost every night of their stay. The primary aurora viewing location used by these tour groups is Mt. Aurora Skiland at Cleary Summit approximately 21 miles from Fairbanks. Visitors leave their Fairbanks hotel around 10:00 p.m. traveling to Cleary Summit by bus and arriving around 10:30 p.m. They leave to return to their Fairbanks hotels around 2:30 a.m.

While other locations around Fairbanks provide aurora-viewing opportunities, Skiland currently is by far the primary destination within a half hour drive of Fairbanks that has good highway access, parking, and a heated aurora viewing concession.

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<sup>2</sup> Milner, Laura M. *Japanese Travel Motivations: The Case of Alaska and the Northern Lights*. Prepared by the University of Alaska Fairbanks, School of Management under a grant from the U.S. Department of Education.

<sup>3</sup> Khavanskay, O.G. and L.M. Milner, *The Winter Japanese Visitor to Alaska: A Survey of Lodging Preferences, Expectations, Expenditures and Demographics of Visitors to Fairbanks*. University of Alaska Fairbanks, School of Management. May 1998.



## 4 Potential Factors Affecting 2001 Aurora Viewing Visitor Arrivals

Japan is one of the few markets that provides year-round visitation to Alaska citing its relatively accessible, low-cost opportunities for aurora viewing as the winter season draw. The aurora viewing market for Alaska was hard hit during the 2001-02 Fall/Winter season, for a combination of reasons. In this section, the following potentially influential factors are assessed.

- Terrorist attacks in the U.S. on September 11, 2001
- Continued stagnation of the Japanese economy
- The profile of Japanese tourists as risk averse travelers
- Reduction in the appeal of air travel due to problems related to heightened security increased travel times, and delays
- Lack of direct flights between Japan and Fairbanks or even Anchorage
- Competition and increased marketing efforts in Japan by Canada and the Scandinavian countries
- Potential negative impacts of the True North haul road

According to the U.S. Department of Commerce, travel to the U.S. from Japan dropped off more than 50 percent after September 11, 2001 (9/11) and currently remains at approximately 60 percent of pre-9/11 levels. On April 19, 2002, the United States and Japan signed a bilateral agreement calling for the creation of tourism expansion council to increase the number of tourists by 20 percent over the next five years.<sup>4</sup> The agreement was signed in response to the severe drop off in travel from the United States to Japan and from Japan to the United States that occurred in response to the 9/11 terrorism attacks.

Telephone interviews were conducted on April 26, 2002 with three Japanese tour operators that broker trips to Fairbanks including Alaska and Pacific Tours (A&P), AIE Tours, and Midnight Sun Express. All three tour operations experienced major declines in the number of clients in Fall/Winter 2001-02 as compared to 2000-01 levels.

**Table 3. Visitor Numbers for Selected Tour Operators, Fall/Winter 2000-01 and 2001-02**

Tour Operator	Estimated Number of Winter Visitors	
	2000-01	2001-02
A&P Tours	2,000	800
AIE	3,000	2,000
Midnight Sun Express	300	150
Total	5,300	2,950

Source: Telephone conversations with Mike Ito of A&P Tours, Shin Suzuki of AIE Tours, and Mr. Kato of Midnight Sun Express.

All three tour operators cited the events of 9/11 as the major factor contributing to the decline in bookings. Two of the operators, A & P Tours and AIE Tours also identified the continued stagnation of

<sup>4</sup> Bonnie Harris and Mark Magnier, "U.S., Japan Sign Accord to Boost Travel Industries", *Los Angeles Times*, April 22, 2002.

the Japanese economy and the relationship of the U.S. dollar to the Japanese yen as contributing factors.

The 2000-2001 and 2001-2002 winters were projected by the University of Alaska Geophysical Institute and confirmed by international counterparts as peak years in an 11-year cycle for aurora viewing. The operator of AIE Tours noted that he had approximately 200 visitors scheduled to arrive in the two-week period in September 2001 when travel was severely disrupted. New screening procedures have increased consumer apprehension about the safety of airline travel and these procedures have increased transit times and made air travel less appealing.

For AIE, bookings appear to have rebounded to almost 2001 levels for February and March. However, the product sold was different and consisted of less expensive packages, which meant that more Japanese visitors stayed in Fairbanks hotels instead of choosing more expensive destinations such as Chena Hot Springs.

A conference call was held between Ed Fogels of the Department of Natural Resources, Kojiro Abe, the Alaska State Representative in Japan, and Dr. Nan Mundy of Northern Economics, Inc. on April 24, 2002. Mr. Abe stated that the promotion of Japanese tourism to Alaska was initiated by Alaska in 1982. He believes that Japanese tour companies are eager to continue to promote Alaska as a travel destination and that he is hopeful that the travel market to Alaska from Japan will recover. However, he noted the increasing competition for the Japanese aurora-viewing visitor from Canada and Scandinavia.

An article in *National Geographic* in November 2001, calls Yellowknife, the capital of Canada's Northwest Territories, "the top global destination for aurora tourism" and reported "...some 12,000 people visited the year before to view the aurora."<sup>5 6</sup> One factor contributing to Yellowknife's success is the cost of travel in Canada versus the cost of travel in the U.S. Figure 2 shows the monthly average exchange rate for Japanese yen and the U.S. and Canada dollars. Both the U.S. dollar and the Canada dollar have gained in strength against the Japanese yen over the period shown, January 2000 through April 29, 2002. Figure 3 shows the relative strength of the Canada dollar to the U.S. dollar, expressed as the cost of one U.S. dollar in terms of Canada dollars.

The figures show that, over time, the number of yen required to purchase U.S. and Canada dollars has increased. The implication of this trend is that trips to the United States and Canada by Japanese visitors have been increasing over time. Figure 2 includes a trend line to indicate the gradual increase in the cost of both dollars. The rate of increase in the cost of a U.S. dollar exceeds that of the Canada dollar. While some of this may be explained by the exchange rate between Canada and the United States, Figure 3 shows that U.S. dollars have become increasingly expensive over time in terms of Canada dollars.

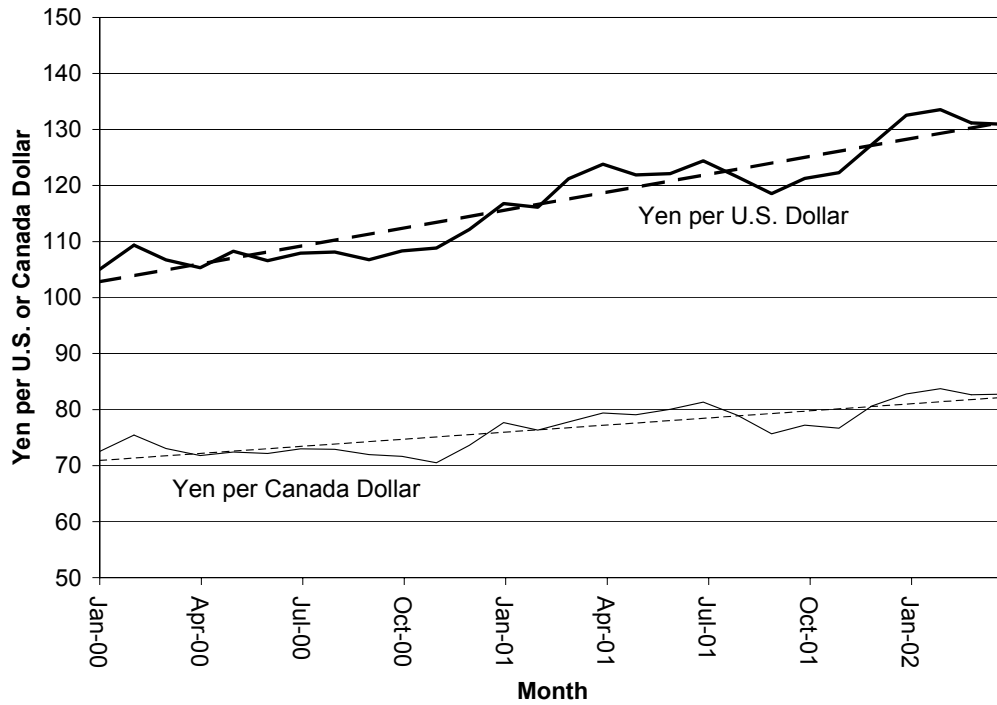
The effect of the exchange rate fluctuations indicated in the two figures suggests that not only are Canada and the United States becoming more expensive for Japanese tourists, but that the United States is becoming more expensive relative to Canada as well. This may explain some declines in Japanese visitors to the United States, and an increasing popularity of Canadian destinations over United States destinations.

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<sup>5</sup> Taylor, Kenny. "Auroras Earth's Grand Show of Lights." *National Geographic*. November 2001.

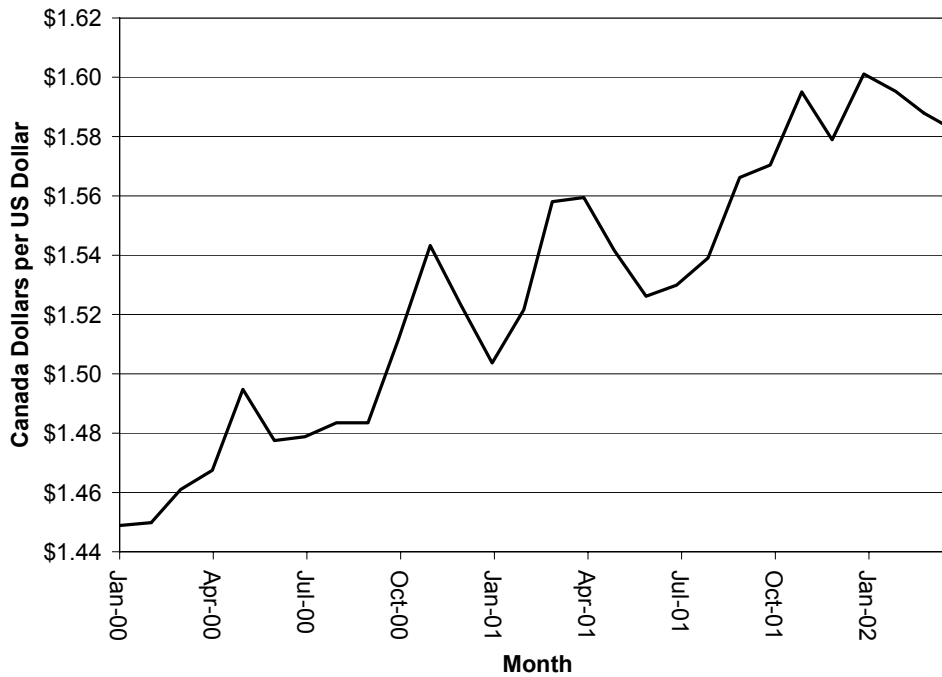
<sup>6</sup> "Northern Lights Lure Japanese Tourists to Northern Canada," *AP Worldstream*, 05/11/2001.

**Figure 2. Monthly Average Interbank Exchange Rate for Japanese Yen to U.S. and Canada Dollars, January 2000 to April 2002**



Source: <http://fxinvestor.oanda.com/convert/fxhistory>

**Figure 3. Monthly Average Interbank Exchange Rate for Canada and U.S. Dollars, January 2000 to April 2002**



Source: <http://fxinvestor.oanda.com/convert/fxhistory>.

Due to the measurable influence that all of these factors had on the number of aurora viewing visitor arrivals, it is impossible to conclude with any quantifiable certainty that the traffic on the True North haul road has had an effect on the number of visitors to Cleary Summit or the Interior.

## **5 Aurora Viewing Locations**

This section provides background information on each of the aurora viewing locations around Fairbanks. It begins with the locations closest to Fairbanks. Information is provided on costs as they appear in either brochures or on the internet, because cost is a major consideration for most Japanese tourists in selecting package trips. However, it must be noted that the prices included in this study are not the same as the costs paid by Japanese tourists when they prepay their package trip before they leave Japan.

### **5.1 Cleary Summit Bed & Breakfast**

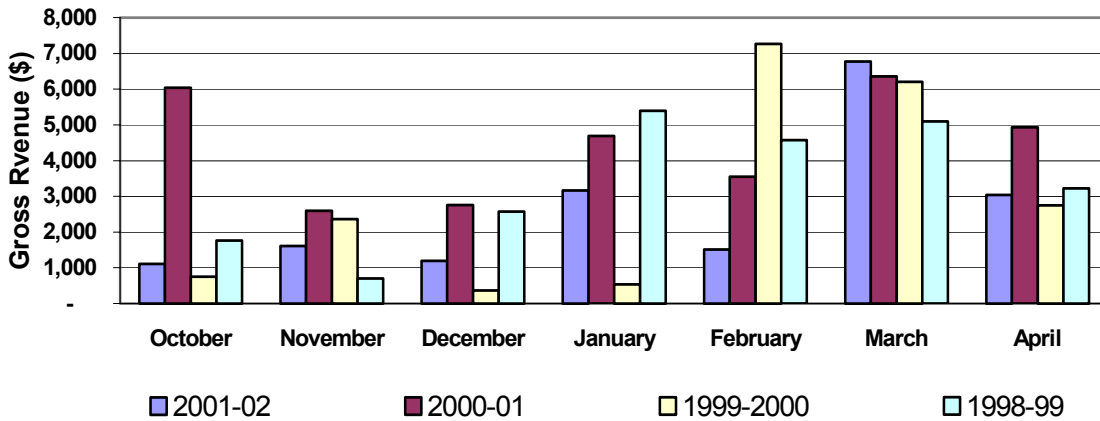
The Cleary Summit Bed & Breakfast is located on Skiland Road on the top of Mt. Aurora, approximately 21 miles north of Fairbanks. This bed and breakfast began operation in 1997, but the owners have lived at Cleary Summit for more than 25 years. Cleary Summit Bed & Breakfast advertises itself as having the best aurora viewing of all the hotels, motels, and bed and breakfast locations in Fairbanks. And with an elevation of 2,100 feet and a 360 degree unobstructed view looking out at the White Mountains, the Tanana Valley, the Alaska Range, and Denali, it would be difficult to argue with this statement.

The Bed & Breakfast has three rooms available. All rooms have a private bath and full kitchen, living room and laundry are available along with a heated aurora viewing area. Summer rental rates are \$100 per night, while winters rates are \$115 per night. Visitors staying at Cleary Summit Bed & Breakfast can walk to Mt. Aurora Skiland for downhill skiing, snowmachining, or to eat at Mount Aurora Fairbanks Creek Lodge. The B & B has Japanese visitors who return every year and one visitor who returns two or three times a year.

The owners of Cleary Summit Bed & Breakfast provided Northern Economics with their gross revenues for 1998 to the present. Figure 4 presents gross revenues for aurora viewing months for the past four seasons. The impacts of the events of 9/11 on revenues are clearly observable in Figure 4. Revenues appear to have rebounded in March 2002. However, part of this increase between March 2002 and March 2001 can be attributed to a small increase in their rates for the 2001-02 season. The revenue figures for Cleary Summit show the variability that frequently occurs with new business, but it is evident that they have developed a strong clientele base. While August and September are not included on the graph below, the numbers for those months demonstrate Cleary Summit B & B has been making headway in marketing August and September as good aurora viewing months.



**Figure 4. Cleary Summit Bed & Breakfast Gross Revenues  
October 2001-April 2002**



The primary deck at this B&B for viewing the aurora faces south; portions of the True North road are visible from this facility. Based on observations by DNR staff, KH&A, LLC, and photography submitted to the State by residents, the lodging experience from the three businesses offering accommodations is now changed by the lights (for two of the three businesses) and dust from the vehicles on the True North haul road. While baseline light impacts to two of the three businesses included lights from the Steese Highway, the lights from the trucks traveling the haul road come within a closer range. However, the fact that visitors lodging in these southside accommodations can walk approximately 1,600 feet to the heated aurora viewing lodge at Mt. Aurora Skiland on the north side of the Summit to view the northern lights in a heated facility presumably mitigates the potential for a significant negative economic impact to the lodging establishments on the south side.

## 5.2 Skiland Bed & Breakfast

Skiland Bed & Breakfast is located next door to, and takes overflow guests from, the Cleary Summit Bed & Breakfast. Accommodations include a one-bedroom apartment in the lower-level. Guests from Skiland Bed and Breakfast usually visit the Cleary Summit Bed & Breakfast for aurora viewing but can also walk to Skiland. Skiland Bed & Breakfast is built on the south side of the ridge and the True North haul road is visible from the private living quarters of the owners but not from the apartment below, which currently constitutes Skiland Bed & Breakfast.

## 5.3 Mt. Aurora Skiland

For most of the winter season in good snow-cover years, Mt. Aurora Skiland is a downhill ski resort with a 3,800-foot double chair lift, equipment rentals, and instruction available. In 2001, lights were added to the ski trails allowing for after-dark operations. In the late night hours, the day lodge is used for aurora viewing and the lights on the ski hill are extinguished. The Skiland day lodge is built on the north side of the ridge and, thus, in most respects is sheltered from any effects that may occur from the lights, dust, and noise from the True North haul road. While the aurora can be viewed from the day lodge, many of the guests stand in the parking lot that has a 360-degree view to watch the aurora. Lights from the vehicles on the haul road are not visible from the parking lot, except through the trees at one specific spot at the far southeast corner of the lot. Faint noise from the trucks can sometimes be heard from the parking lot, but not from the day lodge. When interviewed, all three major Japanese tour operators said that this did not diminish their clients' experience.

As mentioned earlier, the three primary Japanese tour brokers currently bus almost all of their clients staying in Fairbanks hotels to Mt. Aurora Skiland for aurora viewing. Many of these tourists visit Skiland three nights in a row. The admission price to the ski lodge for aurora viewing depends on the size of the group, and ranges from \$14 to \$16 including coffee, tea, and hot chocolate. Most of the Japanese visitors have prepaid for their aurora viewing before leaving Japan.

Table 4 shows that several hundred visits a year were reported by the Skiland operators between the winters of 1991 through 1995, ranging from 275 (1992/93) to 913 (1994/95). The number of visits to view the aurora almost tripled starting with the winter of 1995/96, with 2,694 total visits from December to April.

The annual number of visits to the viewing lodge grew steadily to the winter of 2000/2001 when a peak of 7,954 aurora viewers were counted. This was the first year that visitors began appearing in the extended- season fall months of August through November. Numbers fell drastically in 2001, starting with October. A record 301 visitors in September dropped to only 12 the following month, after 9/11.

Overall, the four-month season from December through March shows the greatest number of visitors with February being the peak month for the eleven-year period.

**Table 4. Number of Aurora Viewers at Mt. Aurora Skiland and Growth Rate, 1992-2002**

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Total	
1991-92	-	-	-	-	-	-	-	-	-	629	
1992-93	-	-	-	-	-	-	-	-	-	275	-56
1993-94	-	-	-	-	-	-	-	-	-	425	55
1994-95	-	-	-	-	-	-	-	-	-	913	115
1995-96	-	-	-	-	313	303	443	781	854	2,694	195
1996-97	-	-	-	-	784	255	1,194	299	1,213	3,745	39
1997-98	-	-	-	-	1,255	1,187	1,482	1,213	66	5,203	39
1998-99	-	-	-	-	977	1,301	1,686	1,883	12	5,859	13
1999-20	-	-	-	-	616	751	1,970	1,709	35	5,081	-13
2000-01	8	167	27	116	1,229	1,150	2,935	2,256	66	7,954	57
2001-02	42	301	12	51	333	143	979	1,131	5	2,997	-62
Total	50	468	39	167	5,507	5,090	10,689	9,272	2,251	35,775	

Source: Steve and Brenda Birdsall.

It is important to note that the average \$523 expenditure by Japanese visitors to Fairbanks in the winter (on other goods and services in and around Fairbanks) cannot be applied directly to the total number of aurora viewing visits to Mt. Aurora Skiland. This is because the average Japanese visitor who stays at a Fairbanks hotel in the winter stays three nights at that hotel and visits Mt. Aurora Skiland each of those three nights—thus accounting for the purchase of an average of three Skiland visits.

## 5.4 Mount Aurora Fairbanks Creek Lodge

This lodge is located just down the hill from Mt. Aurora Skiland and is owned by the same operator. The lodge contains 18 rooms with semiprivate baths, and is in its fifth year of operation. The deck has panoramic views of the Alaska Range, Mt. Denali, the Tanana Valley and the surrounding foothills.

Meals are provided in the Bunkhouse Dining Hall. Winter rates, which include aurora viewing at Skiland as well as two meals are \$204 for a double and \$180 for a single. The summer rates without meals are \$110 for a double and \$100 for a single.

Activities offered at this site in addition to aurora viewing include cross country skiing, alpine skiing, snowboarding, snowmobile rides, snow cat tours, snow shoeing, and guided day hikes. A dog sledding concessionaire worked out of the lodge in previous years, but in the aftermath of 9/11 the concessionaire could not afford to continue and closed in December.

Day packages can include dinner at the lodge combined with aurora viewing for \$50 per person, dinner combined with a snowmobile ride and aurora viewing for \$130, or a day skiing combined with dinner at the lodge and aurora viewing for \$94 per person. Traffic from both the haul road and the Steese Highway can be seen from both the deck and the second floor viewing area of this facility. The impacts on this lodge are similar to those at the other tourism establishments on the south side of Cleary Summit.

## **5.5 Moose Mountain Ski Area**

Moose Mountain Ski Area is approximately a 20-to-30 minute drive from most hotels in the Fairbanks area. It is located at the far west end of the Tanana Valley. The current operator uses buses to transport skiers up to the top of the mountain. A visit to this location demonstrated that the potential for aurora viewing exists. There is a 360-degree view from the top. However, while there is a ski lodge located at the bottom of the slope there are currently no facilities for aurora viewing on top. At present, there is also no electricity at the top. It may be possible to drive aurora viewers to the top of the mountain and let them wait on the buses for viewing. One of the Japanese tour brokers has visited Moose Mountain in the past and indicated concern about the trees and the Fairbanks city lights interfering with aurora viewing. Given its location approximately 18 miles from the True North project, Moose Mountain is not directly affected by the True North haul road.

## **5.6 Chatanika Lodge**

The Chatanika Lodge is located on the Steese Highway and contains 10 rooms, a saloon, a package store, and family-style dining. It is a 35 minute drive from Fairbanks. The lodge is a popular wintertime aurora-viewing destination for Japanese tourists. Chatanika Lodge is also popular with tourists and locals because of its access to a well-developed and well-maintained trail system. In previous years, the Lodge has been full during the aurora viewing months of December, January, February, and March. The aftermath of 9/11 caused a dramatic decrease in bookings this past season.

It is of note that many of the Japanese visitors to Chatanika Lodge are repeat visitors, in part, because of the low cost, and because of the ability to view the aurora from just outside the lodge. A room at Chatanika Lodge costs \$50 a night for one, \$60 per night for two and \$65 a night for three.

Until December 2001, a dog sledding concessionaire worked out of the lodge, but in the aftermath of 9/11, the concessionaire could not afford to continue and closed mid-December. A snowmachine concessionaire operates out of the Lodge providing guided and non-guided snowmobile rides. The snowmachine concessionaire estimates that in previous years approximately 45 percent of his business came from foreign tourists, and approximately 75 percent of that market was composed of Japanese tourists. It is interesting to note that the snowmachine concessionaire has a regular clientele from the Air France cargo pilots that land in Fairbanks. In our discussion with the lodge owner and the snowmachine concessionaire, it became obvious that it was the availability of lodging, food, snowmachine rides, and dog sledding that provided financial stability for all three businesses. The

snowmachine concessionaire pointed out that the more beds that are available for Japanese and other tourists, the better business is for ancillary businesses. The operator also reported no impacts to his business from the True North haul road.

## **5.7 Chatanika Gold Camp**

This historic mining camp is located outside of Fairbanks on the Steese Highway close to Chatanika Lodge. It was not in operation when we visited on April 26, 2002. The camp consists of several buildings including 2 cabins with 4 rooms each and approximately 10 or 12 rooms in the bunkhouse. In the recent past, a restaurant operated here. The aurora can be viewed from this location. In a telephone interview with the owner on April 29, 2002, he stated that he closed the camp because of the number of cancellations that resulted from the events of 9/11. He is planning to reopen May 1 and to expand a deck located on top of the ridge for aurora viewing. He intends to place a yurt on the deck and to purchase an all-terrain vehicle to transport visitors from the lodge up to the aurora viewing deck. This operator reported no impacts to his business from the True North haul road.

## **5.8 Chena Hot Springs**

Chena Hot Springs is a 440-acre, full-service resort with natural mineral hot springs located 60 miles northeast of Fairbanks. It takes approximately 90 minutes each way to drive there from Fairbanks. Chena Hot Springs Resort is considered an excellent spot to view the aurora borealis and has an extensive winter list of activities including indoor and outdoor hot springs pools and hot tubs, dog sledding, dog mushing school, horse sleigh rides, snow coach adventures, guided snowmachining, guided cross-country skiing, guided snowshoeing, and ski and snowshoe rentals. A variety of accommodations is available ranging from tent and recreational vehicle camping to hot tub suites. Tent sites cost \$20 per night, recreational vehicle sites are \$40 per night, and other lodging costs range from \$125 to \$200 per night. Chena Hot Springs Resort's new focus is on ecofriendly tourism and soft adventure.

In an interview on April 25, 2002, the manager of Chena Hot Springs Resort noted a major drop in visitors to Chena Hot Springs as a result of 9/11. In the Fall/Winter season 2000-01, approximately 60 percent of winter visitors were from Japan. That percentage dropped to approximately 30 percent this past winter. Some of the drop was made up by visitors from the lower 48. However, he estimated losses to Chena Hot Springs of approximately \$1.5 million as a result of the events of 9/11. The manager also noted that the initial indicators for Japanese tourism next winter are strong.

The manager of Chena Hot Springs also discussed the fact that the decision by Japanese aurora visitors to stay in Fairbanks was driven by economic considerations. Visitors to Chena Hot Springs often combine their visit with a stay in Fairbanks. Generally, Chena Hot Springs is considered too far from Fairbanks for aurora viewing bus tours on a daily basis. This facility is not located close enough to be negatively impacted by the True North haul road.

## **5.9 Arctic Circle Hot Springs Resort**

The Arctic Circle Hot Springs Resort is located 50 miles south of the Arctic Circle approximately 162 miles from Fairbanks via the Steese Highway. The resort contains an Olympic-size hot springs pool, a dining room, lounge, store, and RV parking. Rental cabins are available at \$85 for two, rooms in the hotel rent for \$50 per night and hostel lodging is available for \$20 per night.

Because of time limitations, Arctic Circle Hot Springs Resort was not contacted regarding bookings of Japanese aurora visitors.

## 5.10 Bettles Lodge

Bettles Lodge is located 35 miles northwest of the Arctic Circle along the Koyukuk River. The lodge is off the road system and is a one-hour flight from Fairbanks. Bettles Lodge caters to the high-end tourist. The historic Main Lodge that has been designated a National Historic Site contains six rooms. There are an additional eight rooms with Jacuzzis in the newer Aurora Lodge. Their overnight tours from Fairbanks in 2002 include the roundtrip airfare from Fairbanks, lodging, all meals, and a dogsled ride in winter or a boat tour in summer. The cost for a two-day one-night tour in a deluxe room is \$500 per person with additional nights at \$173 per person. The standard rooms are \$486 per person with additional nights at \$161 per person. Other activities in addition to aurora viewing include snowmobile trips that range from \$40 to \$325, cross-country skiing, and snowshoeing.

The owner of Bettles Lodge is out of town until May 1 or 2, 2002. However, a telephone conversation on April 28 with workers at the lodge verified that a high percentage of winter visitors to the Lodge are Japanese tourists, and confirmed that bookings from Japanese tourists were down this past winter because of the events of 9/11. Bookings for summer look good.

## 6 Impacts

All commercial aurora viewing operations and operators interviewed for this study experienced dramatic declines in bookings and revenues during the Fall/Winter season of 2001-02. All reported losses, but expressed them in varying terms. For example, Chena Hot Springs suffered a loss of \$1.5 million that they attribute to the events and aftermath of 9/11. Three of the major Japanese tour brokers reported that the aggregate number of visitors they handle dropped from 5,300 in 2000-01 to 2,950 in 2001-02. These brokers also attribute the majority of their losses to the events and the aftermath of 9/11.

In contrast to other tourism operators interviewed, the owners of the businesses at Cleary Summit are concerned that their losses are due in part to noise and visual impacts from the True North haul road. The viewing experience from the south side of the summit is different than it was before the construction and operation of the True North haul road, as described in the following text.

A description of the baseline conditions prior to construction of the haul road includes:

1. traffic lights from the Steese Highway
2. Fort Knox Mine vendors, employees and others traveling the RS2477 route that runs within 330 feet of Mt. Aurora Fairbanks Creek Lodge

Before August of 1998, shift changes of 200+ employees every day occurred at 11 p.m., 7 p.m., 3 p.m. and 7 a.m. In August of 1998, the mine changed to 12-hour shifts with changes at 7 a.m. and 7 p.m. While the mining company constructed the new haul road further away from the residences in an effort to mitigate the impact of the additional haul truck traffic (an average of one truck every four minutes), the light from the headlights from these trucks is visible from the south slope businesses at two points:

1. A stretch of road that runs for approximately three-quarters of a mile to the east of the B&Bs
2. A stretch of road that runs approximately one mile southwest of the south slope B&Bs

Contradictory anecdotal evidence makes it difficult to determine whether or not this change has or will affect the net number of visitor arrivals to these south slope B&Bs in the future. On the one hand, the B&B owners have received verbal and written communications from several visitors complaining that the haul truck noise and lights diminished their visitor experience (one saying he would never return). On the other hand, several of the Japanese visitors in the 2001-2002 season (when the haul road was operational) made return visits within this same season. In addition, an alternate aurora-viewing option for these overnight guests is located within walking distance on the north side of Cleary Summit at Skiland.

The question of impacts to the visitor experience on the north slope of Cleary Summit at the Mt. Aurora Skiland ski and aurora viewing day lodge is clearer. Although operators on the north side contend their visitors' aurora viewing experience is diminished, the preponderance of evidence is to the contrary. The viewshed on the north side of the summit has never experienced the baseline traffic impacts that the south side of the slope has. When queried by researchers as to whether or not their customers had experienced any negative impacts from the haul road truck traffic, all three of the primary Japanese tour operators that transport customers to Cleary Summit said that they had not received one complaint. This is substantiated by the noise monitoring results at the Skiland site, and by site inspections by regulators seeking to verify the owners' reports that their aurora-viewing tourism product has been substantially diminished by light and noise impacts. DNR staff traveled to the site on three occasions in the 2001 viewing season to conduct inspections in response to these complaints.

Staff from DNR's Division of Mining, Land and Water reported that they had to walk to the extreme eastern border of the parking lot in order to be able to see any evidence of truck lights on clear (aurora viewing) nights; even there the truck lights were "barely visible through the trees." This view is verified by Dwayne Adams, L.A., principal landscape architect with Land Design North who conducted an analysis of potential visual impacts from the True North haul road on Cleary Summit during the planning phase of the project. Fogels also observed that when there is low cloud cover on Cleary Summit, lights from all sources, including mining activity, Steese Highway vehicles, and residential lights, can result in a faint orange glow reflecting off of the cloud cover. However, it is important to note that the aurora are not visible when there is low cloud cover, so this reflected light does not impact aurora viewing, regardless of source.

Japanese tourism in the U.S. remains at approximately 60 percent of pre-9/11 levels. The magnitude of 9/11 impacts on all of Alaska's tourism businesses renders it impossible to conclude definitively that changes due to the True North haul road have resulted in a net loss to businesses at Cleary Summit. Qualitative information suggests that the tourism losses experienced at Cleary Summit are attributable to 9/11. Each of the three major tour operators (two of whom provide business to Cleary Summit businesses) stated that they did not believe that any changes in the viewing experience have had, or would have, an impact on their ability to successfully market Cleary Summit. The tour operators reported no complaints regarding haul road impacts. One operator said that he had three employees in Fairbanks during the aurora-viewing season. It was not possible to talk to these employees because they had returned to Japan. However, they had not expressed any concerns to their boss. The only negatives that been expressed were related to a lack of seating and limited restroom capacity, especially with 200 or more viewers onsite.

When assessing impacts, the unit of analysis is an important factor. Impacts change according to the unit of analysis or the geographic scope. For example, the impacts of the True North haul road on businesses at Cleary Summit may be quite different from the impacts of the road on Fairbanks, or the Interior, and/or the State of Alaska. If visitors go to Chena Hot Springs instead of Cleary Summit, there is a clear loss to the businesses at Cleary Summit, but not to the region as a whole or to the state.

The road has only been in operation for one year. In light of all of the other events of the past year, it is too soon to be able to quantify any losses of market share to Cleary Summit operators that may have resulted from the True North haul road. However, it is evident that Cleary Summit is still a preferred destination for tour operators, particularly those catering to budget-conscious tourists.

Currently, Cleary Summit is the primary site close to Fairbanks with a capacity for more than 200 people to wait in warmth for aurora viewing opportunities; the only alternative currently operational is the aurora viewing/ice fishing tours that use heated running busses that they charter to the Chena Lakes Recreation area. Tour operators have looked for alternate sites in the past. Moose Mountain remains a potential alternative, but it is presently undeveloped in terms of a heated facility at the summit for aurora viewing. Also on the horizon is a new aurora-viewing facility to be installed by the owner of Chatanika Gold Camp at the top of the ridge behind his hotel/restaurant/bar facility, 10 minutes north of Skiland on the Steese Highway. Chena Hot Springs and Bettles Lodge involve both increased travel times and increased costs. The profile of visitors who now go to Cleary Summit Bed & Breakfast, Skiland Bed & Breakfast, or Mount Aurora Fairbanks Creek Lodge, matches that of those who can afford to go to the alternative, Chena Hot Springs.

Thus, significant loss in winter tourism business from a regional or statewide perspective could not be attributed to the operation of the True North haul road. Similarly, because there appear to be no significant impacts from the True North haul road on the aurora viewing or skiing products offered at Skiland on the north slope of Cleary Summit, no resultant net loss to either the Skiland destination or the state can be attributed to the haul road.